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(1) GENERAL INFORMATION:

(i) APPLICANT:

- (A) COHEN, Daniel
- (B) BLUMENFELD, Marta
- (C) TCHOUMAKOV, Ilia

(ii) TITLE OF INVENTION: Biallelic markers for use in constructing a high density disequilibrium map of the human genome.

(iii) NUMBER OF SEQUENCES: 336

(iv) CORRESPONDANCE ADDRESS:

- (A) ADDRESSEE: Knobbe, Martens, Olson & Bear
- (B) STREET: 550 West C Street
- (C) CITY: San Diego
- (D) STATE OR PROVINCE: California
- (E) COUNTRY: USA
- (F) ZIP: 92101

(v) COMPUTER READABLE FORM:

- (A) MEDIUM TYPE: Floppy Disk
- (B) COMPUTER: IBM PC compatible
- (C) OPERATING SYSTEM: Win95
- (D) SOFTWARE: Word

(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2103-270
- (B) LOCATION: 1..47

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base g

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2103-270
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2103-270  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

CTTGGATTCA TATGAGACAG CTAGCAGACC TTCAATTCTT CTACACT

47

(2) INFORMATION FOR SEQ ID NO: 2:

- B1
- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2228-301  
(B) LOCATION: 1..47

- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a

- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2228-301  
(B) LOCATION: 1..23

- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2228-301  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

CCCTGCTTAT CCCTGTAAGG TGGAGACCCA TATGGCAAG GCCAGAC

47

(2) INFORMATION FOR SEQ ID NO: 3:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: polymorphic fragment 99-2229-240

(B) LOCATION: 1..47

(ix) FEATURE:

(A) NAME/KEY: polymorphic base

(B) LOCATION: 24

(D) OTHER INFORMATION: base g

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2229-240

(B) LOCATION: 1..23

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2229-240

(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

TCGTCATCGT GGCCTGGGCT ACAGACTACC TGTTCCAGTC CTTCCAG

47

(2) INFORMATION FOR SEQ ID NO: 4:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 47 base pairs

(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: SINGLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: polymorphic fragment 99-2240-281

(B) LOCATION: 1..47

(ix) FEATURE:

(A) NAME/KEY: polymorphic base

(B) LOCATION: 24

(D) OTHER INFORMATION: base c

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2240-281

(B) LOCATION: 1..23

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2240-281  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

GCAATCTTAA TAACTTTA TTTCAGTAAT TCGAATCTT TTTTTCT

47

(2) INFORMATION FOR SEQ ID NO: 5:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2242-206  
(B) LOCATION: 1..47

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base c

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2242-206  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2242-206  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

GTGTTTCTT TTAGTCAAAT TATCTTATAT TTTACTTTT TCTTAAG

47

(2) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- B1*
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2244-83  
(B) LOCATION: 1..47
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2244-83  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2244-83  
(B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

TAATTGTAGA TACTAAGACC ATTATGCTTA AACCATGTAG GTACTGA

47

(2) INFORMATION FOR SEQ ID NO: 7:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2246-340  
(B) LOCATION: 1..47
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2246-340  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2246-340  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

ATTTATATGT TAAATGCAGA GAAAAAGAAA AATAAGTTT GCAGTAA

47

(2) INFORMATION FOR SEQ ID NO: 8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2248-76
- (B) LOCATION: 1..47

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base c

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2248-76
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2248-76
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

GACAGAGAGG GAAGGTAATC TTCCCCTGAA GTCTGCCCAT CCCCTGG

47

(2) INFORMATION FOR SEQ ID NO: 9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

- B |
- (ix) FEATURE:
    - (A) NAME/KEY: polymorphic fragment 99-2250-236
    - (B) LOCATION: 1..47
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base c
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2250-236
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2250-236
    - (B) LOCATION: complement 25..47
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

ATGTATCCAA AACAGAATTACACACTTTGGTTTTTATT TTTTATT

47

(2) INFORMATION FOR SEQ ID NO: 10:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2251-151
  - (B) LOCATION: 1..47
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base a
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2251-151
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2251-151
  - (B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

TGAAAAGAAG TTCAGACGAT TGCAGATAGA CTAGTTGGC TGTTGTG

47

(2) INFORMATION FOR SEQ ID NO: 11:

- B1
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 47 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic fragment 99-2269-179
    - (B) LOCATION: 1..47
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base a
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2269-179
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2269-179
    - (B) LOCATION: complement 25..47
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

AAAATAAAGA AATTCTAGA GACATACAGC CTATCAAGAT CAAACCA

47

(2) INFORMATION FOR SEQ ID NO: 12:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2271-403
  - (B) LOCATION: 1..47

- B |
- (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base a
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2271-403
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2271-403
    - (B) LOCATION: complement 25..47
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

AGGCATTTAT TTCATATTAA TTAACCTTGA TTTTCTTATC TTCAAGT

47

(2) INFORMATION FOR SEQ ID NO: 13:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2272-409
  - (B) LOCATION: 1..47
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base g
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2272-409
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2272-409
  - (B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

AAAAGCACTG CAATTATTTT GGAGACTGTG AAATATTGCA AGTTTTA

47

B |  
(2) INFORMATION FOR SEQ ID NO: 14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2273-528
- (B) LOCATION: 1..47

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base c

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2273-528
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2273-528
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

ACTTGAAGAT AAGAAAATCA AGGCTAATAA ATATGAAATA AATGCCT

47

(2) INFORMATION FOR SEQ ID NO: 15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2275-466
- (B) LOCATION: 1..47

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base

(B) LOCATION: 24  
(D) OTHER INFORMATION: base c

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2275-466  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2275-466  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:

TTGATGATAG CATTAAATAC TCCCCAAAAC TGTGAATAGG GATACTA

47

(2) INFORMATION FOR SEQ ID NO: 16:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2278-276  
(B) LOCATION: 1..47

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2278-276  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2278-276  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:

GAAAAAAATG GGAACATCTT CACAGCCTGT GCATCTCCAA CAAGATT

47

(2) INFORMATION FOR SEQ ID NO: 17:

- B |
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 47 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic fragment 99-2312-358
    - (B) LOCATION: 1..47
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base c
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2312-358
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2312-358
    - (B) LOCATION: complement 25..47
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:

TTGAAGAGAG AGATGGAAAA AACACGTAGGC CTTCTGGGTA AATGGCC

47

(2) INFORMATION FOR SEQ ID NO: 18:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2315-213
  - (B) LOCATION: 1..47
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base a

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2315-213
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2315-213
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

AGATGGATTCTACCCACAGG CAAAAGAAAA CCTTATTTA AAAATAA

47

*B1*  
(2) INFORMATION FOR SEQ ID NO: 19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2320-292
- (B) LOCATION: 1..47

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base c

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2320-292
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2320-292
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

ACTCTCATTC ACTAAACTTC AACCGTTTT ATAAATTAA TGAATT

47

(2) INFORMATION FOR SEQ ID NO: 20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID

- B |
- (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic fragment 99-2321-82
    - (B) LOCATION: 1..47
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base c
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2321-82
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2321-82
    - (B) LOCATION: complement 25..47
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

TAAAGCTTAC TGAGTGTCCA CTCCGGATAC CTACTCAAAT ATTCCT

47

(2) INFORMATION FOR SEQ ID NO: 21:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2324-338
  - (B) LOCATION: 1..47
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base a
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2324-338
  - (B) LOCATION: 1..23

- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2324-338  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:

AGATAGAAGA CAAAATCGCA GGAAAAGAAA TCCCTCAACA GTAAAAAA

47

B (2) INFORMATION FOR SEQ ID NO: 22:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2333-423  
(B) LOCATION: 1..47

- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g

- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2333-423  
(B) LOCATION: 1..23

- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2333-423  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:

GAGACGCTAT CTATGCAAGG AGGGTGTTCACACAGCAGCAG

47

B (2) INFORMATION FOR SEQ ID NO: 23:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

- B |
- (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic fragment 99-2341-485
    - (B) LOCATION: 1..47
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base c
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2341-485
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2341-485
    - (B) LOCATION: complement 25..47
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:

ACACATCTGT CTGTTACCTA CACCTTACAA AGAATCGCAC AGGCTCT

47

(2) INFORMATION FOR SEQ ID NO: 24:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2342-217
  - (B) LOCATION: 1..47
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base c
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2342-217
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2342-217

(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 24:

TAGAGCCTTG GACTTCATG ACAC TTCTAG AAACAGCCCCA GATTGTG

47

(2) INFORMATION FOR SEQ ID NO: 25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2362-270
- (B) LOCATION: 1..47

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base a

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2362-270
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2362-270
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 25:

TCTCTCTTGG GTGGTTCCCTC AACATGTGTG ACCTTGACCA AGTATTG

47

(2) INFORMATION FOR SEQ ID NO: 26:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2364-329  
(B) LOCATION: 1..47
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g
- B1  
(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2364-329  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2364-329  
(B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 26:

ATATAAAATG ATGAACCATA TACGTGAGGC AAGGTAACAT ATAATTG

47

(2) INFORMATION FOR SEQ ID NO: 27:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2367-61  
(B) LOCATION: 1..47
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2367-61  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2367-61  
(B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 27:

TAAACATTTC ATTATTCAG AAAATAATAT GCATTTCAC CAACACA

47

(2) INFORMATION FOR SEQ ID NO: 28:

*B1*  
(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2371-93
- (B) LOCATION: 1..47

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base a

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2371-93
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2371-93
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 28:

CTCTAAACTT TCCTAATACT TACATCACTG CCTACTTTT ACATAAT

47

(2) INFORMATION FOR SEQ ID NO: 29:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: polymorphic fragment 99-2378-200  
(B) LOCATION: 1..47

(ix) FEATURE:

(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2378-200  
(B) LOCATION: 1..23

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2378-200  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 29:

GAGAACTTCC TGTTGAAACCT GTTATAGAAC TGTCTGTCG TCCAAGA

47

(2) INFORMATION FOR SEQ ID NO: 30:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: polymorphic fragment 99-2381-394  
(B) LOCATION: 1..47

(ix) FEATURE:

(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2381-394  
(B) LOCATION: 1..23

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2381-394  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 30:

AGTGGTCTTC AGGTTATTGG TAGAGAAAAG TAGGGGAGCT AAAGGTG

47

(2) INFORMATION FOR SEQ ID NO: 31:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2413-368
- (B) LOCATION: 1..47

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base a

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2413-368
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2413-368
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 31:

ATTTTAAGAG GAAAACCTAA TGGAAGAATT GTACATAATA TTTCATT

47

(2) INFORMATION FOR SEQ ID NO: 32:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2419-285
- (B) LOCATION: 1..47

- B1*
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base c
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2419-285  
(B) LOCATION: 1..23

- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2419-285  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 32:

AAGGGATCAA GCAGTGCCCA CTCCCCACCC TCCAGGGAGC TGTGACT

47

(2) INFORMATION FOR SEQ ID NO: 33:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2559-253  
(B) LOCATION: 1..47
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2559-253  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2559-253  
(B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 33:

CAGGTGTTT CATGCCCTCT TAGGGTGTGT CACATCATCC ATCTCAA

47

*B1*

(2) INFORMATION FOR SEQ ID NO: 34:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2566-112
  - (B) LOCATION: 1..47
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base a
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2566-112
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2566-112
  - (B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 34:

GCCTTCACAA CCGCAGAGGC AAGAGAAGGA GCTTGGCCAC CCTGACT

47

(2) INFORMATION FOR SEQ ID NO: 35:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2567-329
  - (B) LOCATION: 1..47
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24

(D) OTHER INFORMATION: base g

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2567-329
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2567-329
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 35:

BB  
CACTGTCAGA TATGAAATGA TGC GTGGCTT TCTTTGGCCT ATATTTG

47

(2) INFORMATION FOR SEQ ID NO: 36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2570-218
- (B) LOCATION: 1..47

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base c

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2570-218
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2570-218
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 36:

GGAAAGTTCC AAATTATGAG AAGCGAGGCC TCTGAAGTGG CTAAGTT

47

(2) INFORMATION FOR SEQ ID NO: 37:

(i) SEQUENCE CHARACTERISTICS:

- B1*
- (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2571-242  
(B) LOCATION: 1..47
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2571-242  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2571-242  
(B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 37:

ATAATGAATG AGTATTGAT ATTATATAAT TAAATGTGTC AGCATTT

47

(2) INFORMATION FOR SEQ ID NO: 38:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2610-121  
(B) LOCATION: 1..47
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a
- (ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2610-121  
(B) LOCATION: 1..23

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2610-121  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 38:

ATACCCCTTC CCTAGGTATG GCTATATGCT GCACTTAGAA AATTCTC

47

B |  
(2) INFORMATION FOR SEQ ID NO: 39:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: polymorphic fragment 99-2615-83  
(B) LOCATION: 1..47

(ix) FEATURE:

(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base c

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2615-83  
(B) LOCATION: 1..23

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2615-83  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 39:

AACAAATCAC AAGTTGGCAA AAGCAGCAAA TTCTCATCTT CTGGGAA

47

(2) INFORMATION FOR SEQ ID NO: 40:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE

*B |*

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2620-227  
(B) LOCATION: 1..47

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2620-227  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2620-227  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 40:

TTGACTGGGC TCCTGATGTG TCCAGGGTAT CTTGCTGGCT GTTTTGC

47

(2) INFORMATION FOR SEQ ID NO: 41:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 44 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2624-407  
(B) LOCATION: 1..44

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2624-407  
(B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2624-407
- (B) LOCATION: complement 25..44

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 41:

ATCTGGCCAT AGGCAGAACAA TTGGGGGAGA GATGGGGAAA GAGA

44

(2) INFORMATION FOR SEQ ID NO: 42:

B |  
(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2625-70
- (B) LOCATION: 1..47

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base a

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2625-70
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2625-70
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 42:

AGTGACTCAA CCAGAAAGAG AGCAGGAGAG AGGACGAAGA GAGGAGA

47

(2) INFORMATION FOR SEQ ID NO: 43:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- B*
- (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic fragment 99-2630-67
    - (B) LOCATION: 1..47
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base a
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2630-67
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2630-67
    - (B) LOCATION: complement 25..47
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 43:

TAAATTCTGC CTAGAACGATT AAGATTGGTC CAGAACAGGG AGTGT

47

(2) INFORMATION FOR SEQ ID NO: 44:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2633-129
  - (B) LOCATION: 1..47
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base a
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2633-129
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2633-129
  - (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 44:

TAGCTATTTC TTCCCCTAGG CAAAGTAGAC AATGAGAGAA CCCTTGA

47

(2) INFORMATION FOR SEQ ID NO: 45:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2634-341
- (B) LOCATION: 1..47

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base a

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2634-341
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2634-341
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 45:

GGAATCAATA TTTATTTATT ATCAACAGGT GAGACATTAT TTATTAA

47

(2) INFORMATION FOR SEQ ID NO: 46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

- B |
- (ix) FEATURE:
    - (A) NAME/KEY: polymorphic fragment 99-2637-28
    - (B) LOCATION: 1..47
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base a
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2637-28
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2637-28
    - (B) LOCATION: complement 25..47
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 46:

CCATCACTTC CTCCTAGTGA AAAATCAAAG GAGGGTGGGT TTTATAG

47

(2) INFORMATION FOR SEQ ID NO: 47:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2642-255
  - (B) LOCATION: 1..47
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base a
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2642-255
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2642-255
  - (B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 47:

TGAGGGTGT TCCAGAAGAG ACTAGCATT GAATCTGAAG TGAGTAA

47

(2) INFORMATION FOR SEQ ID NO: 48:

- B1
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 47 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic fragment 99-2645-118
    - (B) LOCATION: 1..47
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base g
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2645-118
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2645-118
    - (B) LOCATION: complement 25..47
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 48:

CACAAATTAA TTGCATTGTT ATAGGCTAGC AATGAAGAAT CTGAAAA

47

(2) INFORMATION FOR SEQ ID NO: 49:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2647-368

- B |
- (B) LOCATION: 1..47
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2647-368  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2647-368  
(B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 49:

TTAAGGCCTT CAACTGATTA GACAAGGCC ACTCACATTA TCTGACA

47

(2) INFORMATION FOR SEQ ID NO: 50:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2649-107  
(B) LOCATION: 1..47
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2649-107  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2649-107  
(B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 50:

CACAACTCTG GAGCCTTTA TGAACAGGAC AGCAATGCAC TGAAACT

47

*B1*

(2) INFORMATION FOR SEQ ID NO: 51:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2103-270
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID1
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base c; g in SEQ ID1
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2103-270
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2103-270
  - (B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 51:

CTTGGATTCA TATGAGACAG CTACCAGACC TTCAATTTT CTACACT

47

(2) INFORMATION FOR SEQ ID NO: 52:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2228-301
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID2

*B* |  
(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base g; a in SEQ ID2

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2228-301
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2228-301
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 52:

CCCTGCTTAT CCCTGTAAGG TGGGGACCCA TATGGGCAAG GCCAGAC

47

(2) INFORMATION FOR SEQ ID NO: 53:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2229-240
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID3

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base t; g in SEQ ID3

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2229-240
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2229-240
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 53:

TCGTCATCGT GGCCTGGGCT ACATACTACC TGTTCCAGTC CTTCCAG

47

B1

(2) INFORMATION FOR SEQ ID NO: 54:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2240-281
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID4

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base t; c in SEQ ID4

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2240-281
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2240-281
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 54:

GCAATCTTAA TAACTTTTA TTTTAGTAAT TCGAATCTT TTTTTCT

47

(2) INFORMATION FOR SEQ ID NO: 55:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2242-206
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID5

B |  
(ix) FEATURE:  
    (A) NAME/KEY: polymorphic base  
    (B) LOCATION: 24  
    (D) OTHER INFORMATION: base t; c in SEQ ID5

(ix) FEATURE:  
    (A) NAME/KEY: Potential microsequencing oligo 99-2242-206  
    (B) LOCATION: 1..23

(ix) FEATURE:  
    (A) NAME/KEY: Potential microsequencing oligo 99-2242-206  
    (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 55:

GTGTTTCTT TTAGTCAAAT TATTATATAT TTTACTTTT TCTTAAG

47

(2) INFORMATION FOR SEQ ID NO: 56:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 47 base pairs  
    (B) TYPE: NUCLEIC ACID  
    (C) STRANDEDNESS: SINGLE  
    (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
    (A) ORGANISM: Homo sapiens

(ix) FEATURE:  
    (A) NAME/KEY: polymorphic fragment 99-2244-83  
    (B) LOCATION: 1..47  
    (D) OTHER INFORMATION: variant version of SEQ ID6

(ix) FEATURE:  
    (A) NAME/KEY: polymorphic base  
    (B) LOCATION: 24  
    (D) OTHER INFORMATION: base g; a in SEQ ID6

(ix) FEATURE:  
    (A) NAME/KEY: Potential microsequencing oligo 99-2244-83  
    (B) LOCATION: 1..23

(ix) FEATURE:  
    (A) NAME/KEY: Potential microsequencing oligo 99-2244-83  
    (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 56:

TAATTGTAGA TACTAAGACC ATTGTGCTTA AACCATGTAG GTACTGA

47

(2) INFORMATION FOR SEQ ID NO: 57:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2246-340
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID7

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base g; a in SEQ ID7

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2246-340
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2246-340
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 57:

ATTTATATGT TAAATGCAGA GAAGAAGAAA AATAAGTTT GCAGTAA

47

(2) INFORMATION FOR SEQ ID NO: 58:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2248-76
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID8

B1  
(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base t; c in SEQ ID8

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2248-76  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2248-76  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 58:

GACAGAGAGG GAAGGTAATC TTCTCCTGAA GTCTGCCCAT CCCCTGG

47

(2) INFORMATION FOR SEQ ID NO: 59:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2250-236  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID9

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base t; c in SEQ ID9

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2250-236  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2250-236  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 59:

ATGTATCCAA AACAGAATTA ACATACTTG GGTTTTTAT TTTTATT

47

B | (2) INFORMATION FOR SEQ ID NO: 60:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2251-151
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID10

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base g; a in SEQ ID10

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2251-151
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2251-151
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 60:

TGAAAAGAAG TTCAGACGAT TGC GGATAGA CTAGTTGGC TGTTGTG

47

(2) INFORMATION FOR SEQ ID NO: 61:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2269-179
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID11

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID11

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2269-179  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2269-179  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 61:

AAAATAAAGA AATTCTAGA GACGTACAGC CTATCAAGAT CAAACCA

47

(2) INFORMATION FOR SEQ ID NO: 62:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2271-403  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID12

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID12

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2271-403  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2271-403  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 62:

AGGCATTTAT TTCATATTAA TTAGCCTTGA TTTTCTTATC TTCAAGT

47

B |  
(2) INFORMATION FOR SEQ ID NO: 63:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2272-409
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID13

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base t; g in SEQ ID13

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2272-409
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2272-409
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 63:

AAAAGCACTG CAATTATTTT GGATACTGTG AAATATTGCA AGTTTTA

47

(2) INFORMATION FOR SEQ ID NO: 64:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2273-528
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID14

- B1*
- (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base t; c in SEQ ID14
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2273-528
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2273-528
    - (B) LOCATION: complement 25..47
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 64:

ACTTGAAGAT AAGAAAATCA AGGTTAATAA ATATGAAATA AATGCCT

47

(2) INFORMATION FOR SEQ ID NO: 65:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2275-466
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID15
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base t; c in SEQ ID15
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2275-466
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2275-466
  - (B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 65:

TTGATGATAG CATTAAATAC TCCTAAAAAC TGTGAATAGG GATACTA

47

*B1*

(2) INFORMATION FOR SEQ ID NO: 66:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2278-276
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID16
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base g; a in SEQ ID16
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2278-276
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2278-276
  - (B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 66:

GAAAAAAATG GGAACATCTT CACGGCCTGT GCATCTCCAA CAAGATT

47

(2) INFORMATION FOR SEQ ID NO: 67:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2312-358
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID17

- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base t; c in SEQ ID17
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2312-358  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2312-358  
(B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 67:

B  
TTGAAGAGAG AGATGGAAAA AAATGTAGGC CTTCTGGGTA AATGGCC

47

(2) INFORMATION FOR SEQ ID NO: 68:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2315-213  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID18
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID18
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2315-213  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2315-213  
(B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 68:

AGATGGATTCAACACAGG CAAGAGAAAA CCTTATTTAA AAAATAA

47

*B* |  
(2) INFORMATION FOR SEQ ID NO: 69:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2320-292
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID19
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base t; c in SEQ ID19
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2320-292
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2320-292
  - (B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 69:

ACTCTCATTC ACTAAACTTC AACTGTTTT ATAAATTTAA TGAATT

47

(2) INFORMATION FOR SEQ ID NO: 70:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2321-82
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID20

- B1*
- (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base t; c in SEQ ID20
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2321-82
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2321-82
    - (B) LOCATION: complement 25..47
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 70:

TAAAGCTTAC TGAGTGTCCA CTCTGGATAC CTACTCAAAT ATTTCCT

47

(2) INFORMATION FOR SEQ ID NO: 71:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2324-338
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID21
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base c; a in SEQ ID21
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2324-338
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2324-338
  - (B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 71:

AGATAGAAGA CAAAATCGCA GGACAAGAAA TCCCTCAACA GTAAAAAA

47

B | (2) INFORMATION FOR SEQ ID NO: 72:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2333-423
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID22
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base t; g in SEQ ID22
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2333-423
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2333-423
  - (B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 72:

GAGACGCTAT CTATGCAAGG AGGTTGTTCA ACATTTGGAC AGCCACG

47

(2) INFORMATION FOR SEQ ID NO: 73:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2341-485
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID23

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base t; c in SEQ ID23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2341-485  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2341-485  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 73:

B | ACACATCTGT CTGTTACCTA CACTTACAA AGAACCGCAC AGGCTCT

47

(2) INFORMATION FOR SEQ ID NO: 74:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2342-217  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID24

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base t; c in SEQ ID24

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2342-217  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2342-217  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 74:

TAGAGCCTTG GACTTCATG ACATTTCTAG AACACGCCCA GATTGTG

47

*B1*

(2) INFORMATION FOR SEQ ID NO: 75:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2362-270
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID25

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base g; a in SEQ ID25

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2362-270
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2362-270
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 75:

TCTCTCTTGG GTGGTTCCCTC AACGTGTGTG ACCTTGACCA AGTATTG

47

(2) INFORMATION FOR SEQ ID NO: 76:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2364-329
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID26

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base c; g in SEQ ID26

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2364-329  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2364-329  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 76:

ATATAAAATG ATGAACCATA TACCTGAGGC AAGGTAACAT ATAATTG

47

(2) INFORMATION FOR SEQ ID NO: 77:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2367-61  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID27

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID27

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2367-61  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2367-61  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 77:

TAAACATTTC ATTATTCAG AAAGTAATAT GCATTTCAC CAACACA

47

*Bl*  
  
(2) INFORMATION FOR SEQ ID NO: 78:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2371-93  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID28

- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base c; a in SEQ ID28

- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2371-93  
(B) LOCATION: 1..23

- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2371-93  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 78:

CTCTAAACTT TCCTAATACT TACCTCACTG CCTACTTTT ACATAAT

47

(2) INFORMATION FOR SEQ ID NO: 79:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2378-200  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID29

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID29

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2378-200  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2378-200  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 79:

GAGAACTTCC TGTTGAAACCT GTTGTAGAAC TGTCCCTGTCG TCCAAGA

47

(2) INFORMATION FOR SEQ ID NO: 80:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2381-394  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID30

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID30

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2381-394  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2381-394  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 80:

AGTGGTCTTC AGGTTATTGG TAGGGAAAAG TAGGGGAGCT AAAGGTG

47

*B* |  
(2) INFORMATION FOR SEQ ID NO: 81:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2413-368
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID31
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base g; a in SEQ ID31
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2413-368
  - (B) LOCATION: 1..23
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-2413-368
  - (B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 81:

ATTTTAAGAG GAAAACCTAA TGGGAGAATT GTACATAATA TTTCATT

47

(2) INFORMATION FOR SEQ ID NO: 82:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-2419-285
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID32

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base t; c in SEQ ID32

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2419-285  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2419-285  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 82:

AAGGGATCAA GCAGTGCCCA CTCTCCACCC TCCAGGGAGC TGTGACT

47

(2) INFORMATION FOR SEQ ID NO: 83:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2559-253  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID33

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base t; g in SEQ ID33

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2559-253  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2559-253  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 83:

CAGGTGTTT CATGCCCTCT TAGTGTGTGT CACATCATCC ATCTCAA

47

B | (2) INFORMATION FOR SEQ ID NO: 84:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2566-112  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID34

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID34

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2566-112  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2566-112  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 84:

GCCTTCACAA CCGCAGAGGC AAGGGAAGGA GCTTGGCCAC CCTGACT

47

(2) INFORMATION FOR SEQ ID NO: 85:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2567-329  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID35

B |  
(ix) FEATURE:  
    (A) NAME/KEY: polymorphic base  
    (B) LOCATION: 24  
    (D) OTHER INFORMATION: base t; g in SEQ ID35

(ix) FEATURE:  
    (A) NAME/KEY: Potential microsequencing oligo 99-2567-329  
    (B) LOCATION: 1..23

(ix) FEATURE:  
    (A) NAME/KEY: Potential microsequencing oligo 99-2567-329  
    (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 85:

CACTGTCAGA TATGAAATGA TGCTTGGCTT TCTTTGGGCT ATATTTG

47

(2) INFORMATION FOR SEQ ID NO: 86:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 47 base pairs  
    (B) TYPE: NUCLEIC ACID  
    (C) STRANDEDNESS: SINGLE  
    (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
    (A) ORGANISM: Homo sapiens

(ix) FEATURE:  
    (A) NAME/KEY: polymorphic fragment 99-2570-218  
    (B) LOCATION: 1..47  
    (D) OTHER INFORMATION: variant version of SEQ ID36

(ix) FEATURE:  
    (A) NAME/KEY: polymorphic base  
    (B) LOCATION: 24  
    (D) OTHER INFORMATION: base t; c in SEQ ID36

(ix) FEATURE:  
    (A) NAME/KEY: Potential microsequencing oligo 99-2570-218  
    (B) LOCATION: 1..23

(ix) FEATURE:  
    (A) NAME/KEY: Potential microsequencing oligo 99-2570-218  
    (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 86:

GGAAAGTTCC AAATTATGAG AAGTGAGGCC TCTGAAGTGG CTAAGTT

47

B |  
(2) INFORMATION FOR SEQ ID NO: 87:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2571-242  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID37

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID37

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2571-242  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2571-242  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 87:

ATAATGAATG AGTATTGAT ATTGTATAAT TAAATGTGTC AGCATTT

47

(2) INFORMATION FOR SEQ ID NO: 88:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2610-121  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID38

B |  
(ix) FEATURE:  
    (A) NAME/KEY: polymorphic base  
    (B) LOCATION: 24  
    (D) OTHER INFORMATION: base c; a in SEQ ID38

(ix) FEATURE:  
    (A) NAME/KEY: Potential microsequencing oligo 99-2610-121  
    (B) LOCATION: 1..23

(ix) FEATURE:  
    (A) NAME/KEY: Potential microsequencing oligo 99-2610-121  
    (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 88:

ATACCCCTTC CCTAGGTATG GCTCTATGCT GCACTTAGAA AATTCTC

47

(2) INFORMATION FOR SEQ ID NO: 89:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 47 base pairs  
    (B) TYPE: NUCLEIC ACID  
    (C) STRANDEDNESS: SINGLE  
    (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
    (A) ORGANISM: Homo sapiens

(ix) FEATURE:  
    (A) NAME/KEY: polymorphic fragment 99-2615-83  
    (B) LOCATION: 1..47  
    (D) OTHER INFORMATION: variant version of SEQ ID39

(ix) FEATURE:  
    (A) NAME/KEY: polymorphic base  
    (B) LOCATION: 24  
    (D) OTHER INFORMATION: base t; c in SEQ ID39

(ix) FEATURE:  
    (A) NAME/KEY: Potential microsequencing oligo 99-2615-83  
    (B) LOCATION: 1..23

(ix) FEATURE:  
    (A) NAME/KEY: Potential microsequencing oligo 99-2615-83  
    (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 89:

AACAAATCAC AAGTTGGCAA AAGTAGCAAA TTCTCATCTT CTGGGAA

47

B | (2) INFORMATION FOR SEQ ID NO: 90:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2620-227  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID40

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID40

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2620-227  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2620-227  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 90:

TTGACTGGGC TCCTGATGTG TCCGGGGTAT CTTGCTGGCT GTTTTGC

47

(2) INFORMATION FOR SEQ ID NO: 91:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 44 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2624-407  
(B) LOCATION: 1..44  
(D) OTHER INFORMATION: variant version of SEQ ID41

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base t; g in SEQ ID41

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2624-407  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2624-407  
(B) LOCATION: complement 25..44

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 91:

ATCTGGCCAT AGGCAGAACCA TTGTGGGAGA GATGGGGAAA GAGA

44

(2) INFORMATION FOR SEQ ID NO: 92:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2625-70  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID42

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID42

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2625-70  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2625-70  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 92:

AGTGACTCAA CCAGAAAGAG AGCGGGAGAG AGGACGAAGA GAGGAGA

47

B | (2) INFORMATION FOR SEQ ID NO: 93:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2630-67  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID43
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID43
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2630-67  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2630-67  
(B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 93:

TAAATTCTGC CTAGAACGATT AAGGTTGGTC CAGAACAGGG AGTGT

47

(2) INFORMATION FOR SEQ ID NO: 94:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2633-129  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID44

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base c; a in SEQ ID44

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2633-129
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2633-129
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 94:

TAGCTATTTC TTCCCCTAGG CAACGTAGAC AATGAGAGAA CCCTTGA

47

(2) INFORMATION FOR SEQ ID NO: 95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-2634-341
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID45

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base g; a in SEQ ID45

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2634-341
- (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-2634-341
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 95:

GGAATCAATA TTTATTATT ATCGACAGGT GAGACATTAT TTATTAA

47

B | (2) INFORMATION FOR SEQ ID NO: 96:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2637-28  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID46

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID46

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2637-28  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2637-28  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 96:

CCATCACTTC CTCCTAGTGA AAAGTCAAAG GAGGGTGGGT TTTATAG

47

(2) INFORMATION FOR SEQ ID NO: 97:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2642-255  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID47

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID47

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2642-255  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2642-255  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 97:

TGAGGGTGTT TCCAGAACAG ACTGGCATTT GAATCTGAAG TGAGTAA

47

(2) INFORMATION FOR SEQ ID NO: 98:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2645-118  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID48

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base t; g in SEQ ID48

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2645-118  
(B) LOCATION: 1..23

(ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2645-118  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 98:

CACAAATTAA TTGCATTGTT ATATGCTAGC AATGAAGAAT CTGAAAA

47

(2) INFORMATION FOR SEQ ID NO: 99:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- B |  
(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2647-368  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID49
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g; a in SEQ ID49
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2647-368  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2647-368  
(B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 99:

TTAAGGCCTT CAACTGATTA GACGAGGCC ACTCACATTA TCTGACA

47

(2) INFORMATION FOR SEQ ID NO: 100:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2649-107  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID50

- B |
- (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base t; a in SEQ ID50
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2649-107
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-2649-107
    - (B) LOCATION: complement 25..47
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 100:

CACAACTCTG GAGCCTTTA TGATCAGGAC AGCAATGCAC TGAAACT

47

(2) INFORMATION FOR SEQ ID NO: 101:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 18 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: upstream amplification primer for SEQ ID1, SEQ ID51
  - (B) LOCATION: 1..18
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 101:

CCTGGATTCT GACCCATC

18

(2) INFORMATION FOR SEQ ID NO: 102:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 18 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID2, SEQ ID52  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 102:

TCTACCTCTA CCTCTTTC

18

B | (2) INFORMATION FOR SEQ ID NO: 103:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID3, SEQ ID53  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 103:

CTTCCCATAC CTCTGATAC

19

(2) INFORMATION FOR SEQ ID NO: 104:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID4, SEQ ID54  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 104:

TTAACAGTG AAGCCATC

18

*B1*  
(2) INFORMATION FOR SEQ ID NO: 105:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 18 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: upstream amplification primer for SEQ ID5, SEQ ID55
  - (B) LOCATION: 1..18
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 105:

TGATGTGT GACTCAGG

18

(2) INFORMATION FOR SEQ ID NO: 106:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 18 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: upstream amplification primer for SEQ ID6, SEQ ID56
  - (B) LOCATION: 1..18
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 106:

ATAGAGGAAC CAAACCTG

18

(2) INFORMATION FOR SEQ ID NO: 107:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 18 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: upstream amplification primer for SEQ ID7, SEQ ID57  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 107:

AGCAGCATGG AAGCAAAC

18

B | (2) INFORMATION FOR SEQ ID NO: 108:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: upstream amplification primer for SEQ ID8, SEQ ID58  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 108:

CTGATGAAAG TGGCTCTC

18

(2) INFORMATION FOR SEQ ID NO: 109:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: upstream amplification primer for SEQ ID9, SEQ ID59

(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 109:

TGTATCTGAG GTCTAAAAC

19

(2) INFORMATION FOR SEQ ID NO: 110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 18 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: upstream amplification primer for SEQ ID10, SEQ ID60
- (B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 110:

TATATGTAGA GGGTGAGG

18

(2) INFORMATION FOR SEQ ID NO: 111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 19 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: upstream amplification primer for SEQ ID11, SEQ ID61
- (B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 111:

AGGCTAAGAA AAAAAGAGG

19

B | (2) INFORMATION FOR SEQ ID NO: 112:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 19 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: upstream amplification primer for SEQ ID12, SEQ ID62
  - (B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 112:

TGAAAAGACT AAGTTCTGG

19

(2) INFORMATION FOR SEQ ID NO: 113:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 18 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: upstream amplification primer for SEQ ID13, SEQ ID63
  - (B) LOCATION: 1..18
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 113:

ATGCTAGAGG AAAGGAAC

18

(2) INFORMATION FOR SEQ ID NO: 114:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 18 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID14, SEQ ID64  
(B) LOCATION: 1..18
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 114:

ATACCAGGGA CTTTAGTG

18

(2) INFORMATION FOR SEQ ID NO: 115:

- B |  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID15, SEQ ID65  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 115:

AGATTCAGAC CAATTCAC

19

(2) INFORMATION FOR SEQ ID NO: 116:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID16, SEQ ID66  
(B) LOCATION: 1..18
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 116:

TGCTTGATT TGACCTG

18

(2) INFORMATION FOR SEQ ID NO: 117:

- B |
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 19 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: upstream amplification primer for SEQ ID17, SEQ ID67
    - (B) LOCATION: 1..19
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 117:

GCCTATCTTG TTTTACTG

19

(2) INFORMATION FOR SEQ ID NO: 118:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 19 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: upstream amplification primer for SEQ ID18, SEQ ID68
  - (B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 118:

TTCAGAGCAA CAATTTGG

19

(2) INFORMATION FOR SEQ ID NO: 119:

- (i) SEQUENCE CHARACTERISTICS:

- B1
- (A) LENGTH: 20 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID19, SEQ ID69  
(B) LOCATION: 1..20
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 119:

CCAAGTTTAT GAGATTAGAG

20

(2) INFORMATION FOR SEQ ID NO: 120:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID20, SEQ ID70  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 120:

CTAACCTAGA TGATCTTCC

19

(2) INFORMATION FOR SEQ ID NO: 121:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID21, SEQ ID71  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 121:

TGTCCCAAGT TTAGTTCC

18

(2) INFORMATION FOR SEQ ID NO: 122:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID22, SEQ ID72  
(B) LOCATION: 1..21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 122:

CCAGGAATAA TACTTGCAT C

21

(2) INFORMATION FOR SEQ ID NO: 123:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID23, SEQ ID73  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 123:

CTCAGTTTTT CTTTCCACC

19

(2) INFORMATION FOR SEQ ID NO: 124:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID24, SEQ ID74  
(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 124:

GACTCAGGCA CAACTTTAG

20

(2) INFORMATION FOR SEQ ID NO: 125:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID25, SEQ ID75  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 125:

TACAGCAATG GTATAAAGC

19

(2) INFORMATION FOR SEQ ID NO: 126:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: upstream amplification primer for SEQ ID26, SEQ ID76  
(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 126:

TTATCCATCA TTTAGAAGGC

20

(2) INFORMATION FOR SEQ ID NO: 127:

B  
(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: upstream amplification primer for SEQ ID27, SEQ ID77  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 127:

CACTGGAGAT AGCTGAAC

18

(2) INFORMATION FOR SEQ ID NO: 128:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: upstream amplification primer for SEQ ID28, SEQ ID78

(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 128:

GTACTGTCAA ATCATCACC

19

(2) INFORMATION FOR SEQ ID NO: 129:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID29, SEQ ID79  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 129:

CGGGCATAAA AATGCAGG

18

(2) INFORMATION FOR SEQ ID NO: 130:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID30, SEQ ID80  
(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 130:

GTATATGTGA AGGTTGTGGG

20

(2) INFORMATION FOR SEQ ID NO: 131:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 19 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: upstream amplification primer for SEQ ID31, SEQ ID81
  - (B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 131:

GTAAGATGTG ACTTGCTCC

19

(2) INFORMATION FOR SEQ ID NO: 132:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 20 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: upstream amplification primer for SEQ ID32, SEQ ID82
  - (B) LOCATION: 1..20
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 132:

CCAGCTTGAA TTTTGGTGAG

20

(2) INFORMATION FOR SEQ ID NO: 133:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 18 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID33, SEQ ID83  
(B) LOCATION: 1..18
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 133:

GCATATCTTG GTGGTCTG

18

(2) INFORMATION FOR SEQ ID NO: 134:

- B/
- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID34, SEQ ID84  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 134:

AGGGTTCAAA GGAAGGAGG

19

(2) INFORMATION FOR SEQ ID NO: 135:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID35, SEQ ID85  
(B) LOCATION: 1..20
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 135:

GAAAAAGAAG GGAAAGAAAAG

20

(2) INFORMATION FOR SEQ ID NO: 136:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID36, SEQ ID86  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 136:

GTTTGTCTTG GCTATTAAG

19

(2) INFORMATION FOR SEQ ID NO: 137:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID37, SEQ ID87  
(B) LOCATION: 1..18
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 137:

TGAAAAAGTG GGTAGCAG

18

(2) INFORMATION FOR SEQ ID NO: 138:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID38, SEQ ID88  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 138:

ATATCAGGGC AGGCACAAG

19

B \ (2) INFORMATION FOR SEQ ID NO: 139:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID39, SEQ ID89  
(B) LOCATION: 1..18
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 139:

GGAAGAGGGC AACTTAC

18

B \ (2) INFORMATION FOR SEQ ID NO: 140:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID40, SEQ ID90  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 140:

TGAAATGGGC TGTAGATG

18

B1  
(2) INFORMATION FOR SEQ ID NO: 141:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID41, SEQ ID91  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 141:

TTAACCTTG GCTTCCTG

18

(2) INFORMATION FOR SEQ ID NO: 142:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID42, SEQ ID92  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 142:

TTAACCTTT TGTCGCTG

18

(2) INFORMATION FOR SEQ ID NO: 143:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID43, SEQ ID93  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 143:

ATGTAACAGA TGTCCAAAG

19

(2) INFORMATION FOR SEQ ID NO: 144:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID44, SEQ ID94  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 144:

CTAAGGGTCT TCTTTCTG

18

(2) INFORMATION FOR SEQ ID NO: 145:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: upstream amplification primer for SEQ ID45, SEQ ID95  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 145:

GGTGTATTAA GGTTTGTTGG

19

B | (2) INFORMATION FOR SEQ ID NO: 146:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: upstream amplification primer for SEQ ID46, SEQ ID96  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 146:

CTACCATCAC TTTCCCTCC

18

(2) INFORMATION FOR SEQ ID NO: 147:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: upstream amplification primer for SEQ ID47, SEQ ID97

(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 147:

ATAACTAGGC ATCCAGAC

18

(2) INFORMATION FOR SEQ ID NO: 148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 20 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: upstream amplification primer for SEQ ID48, SEQ ID98
- (B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 148:

CGACATAATT TGGTATGTAG

20

(2) INFORMATION FOR SEQ ID NO: 149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 18 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: upstream amplification primer for SEQ ID49, SEQ ID99
- (B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 149:

TCACCAAGTG TCATCGTC

18

(2) INFORMATION FOR SEQ ID NO: 150:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID50, SEQ ID100  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 150:

GAGACTTTGT AACTTTGTG

19

(2) INFORMATION FOR SEQ ID NO: 151:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID1, SEQ ID51  
(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 151:

GTCTTCATAA GTCTTCAGTG

20

(2) INFORMATION FOR SEQ ID NO: 152:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID2, SEQ ID52  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 152:

CAAAACACTC CCTCACAC

18

(2) INFORMATION FOR SEQ ID NO: 153:

B1  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID3, SEQ ID53  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 153:

CAGGTGATGT CTGGATAC

18

(2) INFORMATION FOR SEQ ID NO: 154:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID4, SEQ ID54  
(B) LOCATION: 1..21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 154:

AAGACAACAA GAACTAAATC C

21

(2) INFORMATION FOR SEQ ID NO: 155:

- B |
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 20 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: downstream amplification primer for SEQ ID5, SEQ ID55
    - (B) LOCATION: 1..20
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 155:

TCCCCAATAG ATTAAAGTTC

20

(2) INFORMATION FOR SEQ ID NO: 156:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 18 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: downstream amplification primer for SEQ ID6, SEQ ID56
  - (B) LOCATION: 1..18
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 156:

CTGAGCATCA AATAGGAG

18

(2) INFORMATION FOR SEQ ID NO: 157:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID7, SEQ ID57  
(B) LOCATION: 1..21
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 157:

B | TCATTACAGA AAAAGCCAAA G

21

(2) INFORMATION FOR SEQ ID NO: 158:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID8, SEQ ID58  
(B) LOCATION: 1..20
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 158:

TCCTTCTCCA CCTAAAATTC

20

(2) INFORMATION FOR SEQ ID NO: 159:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID9, SEQ ID59  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 159:

ACTGCTTCTG CTCTCTTG

18

(2) INFORMATION FOR SEQ ID NO: 160:

B1  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID10, SEQ ID60  
(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 160:

TGAACATACA AAAACACTGG

20

(2) INFORMATION FOR SEQ ID NO: 161:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID11, SEQ ID61  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 161:

AGAGTTGTTG GCATGTAG

18

(2) INFORMATION FOR SEQ ID NO: 162:

- B1
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 18 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens

- (ix) FEATURE:
  - (A) NAME/KEY: downstream amplification primer for SEQ ID12, SEQ ID62
  - (B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 162:

AACTGCTCAG CAACTGTG

18

(2) INFORMATION FOR SEQ ID NO: 163:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens

- (ix) FEATURE:
  - (A) NAME/KEY: downstream amplification primer for SEQ ID13, SEQ ID63
  - (B) LOCATION: 1..21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 163:

TTAGAACACT TTTATGGGAA C

21

(2) INFORMATION FOR SEQ ID NO: 164:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 19 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: downstream amplification primer for SEQ ID14, SEQ ID64  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 164:

B1  
GTCCTAGAAC GAGCAAATG

19

(2) INFORMATION FOR SEQ ID NO: 165:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: downstream amplification primer for SEQ ID15, SEQ ID65  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 165:

AGAGAAAGAA CCAGAGCC

18

(2) INFORMATION FOR SEQ ID NO: 166:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: downstream amplification primer for SEQ ID16, SEQ ID66

(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 166:

TGGAGTCTAA ACTAGGTG

18

(2) INFORMATION FOR SEQ ID NO: 167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 18 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: downstream amplification primer for SEQ ID17, SEQ ID67
- (B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 167:

GGACCTTTA AGAGTGTG

18

(2) INFORMATION FOR SEQ ID NO: 168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 19 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: downstream amplification primer for SEQ ID18, SEQ ID68
- (B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 168:

TGGTTCTTC AAACAAGAG

19

(2) INFORMATION FOR SEQ ID NO: 169:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID19, SEQ ID69  
(B) LOCATION: 1..21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 169:

AAGTTGGATA ACCTTCTTT G

21

(2) INFORMATION FOR SEQ ID NO: 170:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID20, SEQ ID70  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 170:

TAGTTTCGTG AACTTATCC

19

(2) INFORMATION FOR SEQ ID NO: 171:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID21, SEQ ID71  
(B) LOCATION: 1..21
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 171:

GTTCACATTA TGCCCCTTT C

21

*B1*  
(2) INFORMATION FOR SEQ ID NO: 172:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID22, SEQ ID72  
(B) LOCATION: 1..18
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 172:

CTCCACTGCC ACAACTTC

18

(2) INFORMATION FOR SEQ ID NO: 173:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID23, SEQ ID73  
(B) LOCATION: 1..21
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 173:

TGCTCTGCTT GTAATGTTAT G

21

(2) INFORMATION FOR SEQ ID NO: 174:

- B  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID24, SEQ ID74  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 174:

CAAGGTTGCC AGTCACATC

19

(2) INFORMATION FOR SEQ ID NO: 175:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID25, SEQ ID75  
(B) LOCATION: 1..18
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 175:

ATGAAGATAAC GCAGCCAG

18

(2) INFORMATION FOR SEQ ID NO: 176:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID26, SEQ ID76  
(B) LOCATION: 1..21
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 176:

CTCATTAAAC TCCCATTCCCT C

21

(2) INFORMATION FOR SEQ ID NO: 177:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID27, SEQ ID77  
(B) LOCATION: 1..21
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 177:

TGCTTTCTT GTCCCTGATT G

21

(2) INFORMATION FOR SEQ ID NO: 178:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID28, SEQ ID78  
(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 178:

GCATTGAATC CGTAAATTTC

20

(2) INFORMATION FOR SEQ ID NO: 179:

B1  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID29, SEQ ID79  
(B) LOCATION: 1..21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 179:

CAGTTTGTT CATTGTGGGA G

21

(2) INFORMATION FOR SEQ ID NO: 180:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID30, SEQ ID80  
(B) LOCATION: 1..21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 180:

AAATCCAAC T ATGTCACTTC C

21

(2) INFORMATION FOR SEQ ID NO: 181:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID31, SEQ ID81  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 181:

AATGTCCCCCT CCTCCTCTG

19

(2) INFORMATION FOR SEQ ID NO: 182:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID32, SEQ ID82  
(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 182:

GCCACAAAGTA TTTGGGTGCC

20

(2) INFORMATION FOR SEQ ID NO: 183:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: downstream amplification primer for SEQ ID33, SEQ ID83  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 183:

CCTACGGTTT GTCATAAAG

19

(2) INFORMATION FOR SEQ ID NO: 184:

B  
(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: downstream amplification primer for SEQ ID34, SEQ ID84  
(B) LOCATION: 1..21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 184:

TGTAACAGGG GACATGGGAA G

21

(2) INFORMATION FOR SEQ ID NO: 185:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: downstream amplification primer for SEQ ID35, SEQ ID85

(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 185:

CAATTTGTA TGGATGACAG

20

(2) INFORMATION FOR SEQ ID NO: 186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: downstream amplification primer for SEQ ID36, SEQ ID86
- (B) LOCATION: 1..21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 186:

TGGTGGTGGA AAAAAAGAAG G

21

(2) INFORMATION FOR SEQ ID NO: 187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: downstream amplification primer for SEQ ID37, SEQ ID87
- (B) LOCATION: 1..21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 187:

CTATAACTCT TATCAGTGAA C

21

(2) INFORMATION FOR SEQ ID NO: 188:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

- (ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID38, SEQ ID88  
(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 188:

AGGTCACTCA AGTATTATGG

20

B) (2) INFORMATION FOR SEQ ID NO: 189:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

- (ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID39, SEQ ID89  
(B) LOCATION: 1..21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 189:

CCCCAGCTCC CAAATAATGA C

21

(2) INFORMATION FOR SEQ ID NO: 190:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID40, SEQ ID90  
(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 190:

TCCACAACAG ACACTTAAAC

20

(2) INFORMATION FOR SEQ ID NO: 191:

B )  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID41, SEQ ID91  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 191:

TCTTTCCCC CATCTCTC

18

(2) INFORMATION FOR SEQ ID NO: 192:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID42, SEQ ID92  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 192:

TCCCCCTTCTA TTGTCTACC

19

(2) INFORMATION FOR SEQ ID NO: 193:

- B |
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 18 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: downstream amplification primer for SEQ ID43, SEQ ID93
    - (B) LOCATION: 1..18
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 193:

GGTTTGTGTT CAGTACGG

18

(2) INFORMATION FOR SEQ ID NO: 194:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: downstream amplification primer for SEQ ID44, SEQ ID94
  - (B) LOCATION: 1..21
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 194:

TGTATATGCC TGGTGAAAT G

21

(2) INFORMATION FOR SEQ ID NO: 195:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID45, SEQ ID95  
(B) LOCATION: 1..21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 195:

GTGAAAGAAA CTTGATAGAG G

21

B | (2) INFORMATION FOR SEQ ID NO: 196:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID46, SEQ ID96  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 196:

CCTCCAACAG TAAGAAC

18

(2) INFORMATION FOR SEQ ID NO: 197:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID47, SEQ ID97  
(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 197:

CAGAACCAATT AACTATTTCAC

20

(2) INFORMATION FOR SEQ ID NO: 198:

B )  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID48, SEQ ID98  
(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 198:

GCCATTTGGA ATTTTGATAG

20

(2) INFORMATION FOR SEQ ID NO: 199:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID49, SEQ ID99  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 199:

TGCAGCATCC CTGGAAGTC

19

(2) INFORMATION FOR SEQ ID NO: 200:

- B  
|  
ID100
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 21 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens

- (ix) FEATURE:
  - (A) NAME/KEY: downstream amplification primer for SEQ ID50, SEQ ID100
    - (B) LOCATION: 1..21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 200:

GAGACATCAT ATCTGTGTTT G

21

(2) INFORMATION FOR SEQ ID NO: 201:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 19 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens

- (ix) FEATURE:
  - (A) NAME/KEY: microsequencing oligo 99-2103-270.mis1
    - (B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 201:

GATTCATATG AGACAGCTA

19

(2) INFORMATION FOR SEQ ID NO: 202:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2228-301.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 202:

CCCTGCTTAT CCCTGTAAGG TGG

23

(2) INFORMATION FOR SEQ ID NO: 203:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2229-240.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 203:

TCGTCATCGT GGCCTGGGCT ACA

23

(2) INFORMATION FOR SEQ ID NO: 204:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: microsequencing oligo 99-2240-281.mis1  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 204:

TCTTAATAAC TTTTATTT

19

(2) INFORMATION FOR SEQ ID NO: 205:

B |  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2242-206.mis1  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 205:

TTCTTTTAG TCAAATTAT

19

(2) INFORMATION FOR SEQ ID NO: 206:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2244-83.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 206:

TAATTGAGA TACTAAGACC ATT

23

(2) INFORMATION FOR SEQ ID NO: 207:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- B |  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2246-340.mis1  
(B) LOCATION: 1..23
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 207:

ATTTATATGT TAAATGCAGA GAA

23

(2) INFORMATION FOR SEQ ID NO: 208:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2248-76.mis1  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 208:

GAGAGGGAAG GTAATCTTC

19

(2) INFORMATION FOR SEQ ID NO: 209:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2250-236.mis1  
(B) LOCATION: 1..23  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 209:

TTTTATCCAA AACAGAATTAA ACA

23

(2) INFORMATION FOR SEQ ID NO: 210:

- B |  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2251-151.mis1  
(B) LOCATION: 1..23  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 210:

TGAAAAGAAG TTCAGACGAT TGC

23

(2) INFORMATION FOR SEQ ID NO: 211:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2269-179.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 211:

AAAATAAAGA AATTCTAGA GAC

23

(2) INFORMATION FOR SEQ ID NO: 212:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2271-403.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 212:

AGGCATTTAT TTCATATTAA TTA

23

(2) INFORMATION FOR SEQ ID NO: 213:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2272-409.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 213:

AAAAGCACTG CAATTATTTT GGA

23

(2) INFORMATION FOR SEQ ID NO: 214:

- B1*
- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2273-528.mis1  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 214:

GAAGATAAGA AAATCAAGG

19

(2) INFORMATION FOR SEQ ID NO: 215:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2275-466.mis1  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 215:

TGATAGCATT AAATACTCC

19

(2) INFORMATION FOR SEQ ID NO: 216:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: potential microsequencing oligo 99-2278-276.mis1
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 216:

GAAAAAAATG GGAACATCTT CAC

23

B (2) INFORMATION FOR SEQ ID NO: 217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 23 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: microsequencing oligo 99-2312-358.mis1
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 217:

TTTAGAGAG AGATGGAAA AAA

23

B (2) INFORMATION FOR SEQ ID NO: 218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 23 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: potential microsequencing oligo 99-2315-213.mis1
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 218:

AGATGGATTCTACCCACAGGCAA

23

(2) INFORMATION FOR SEQ ID NO: 219:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2320-292.mis1  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 219:

TCATTCACTAAACTTCAAC

19

(2) INFORMATION FOR SEQ ID NO: 220:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2321-82.mis1  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 220:

GCTTACTGAGTGTCCACTC

19

(2) INFORMATION FOR SEQ ID NO: 221:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID

- B1
- (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2324-338.mis1  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 221:

AGAAGACAAA ATCGCAGGA

19

(2) INFORMATION FOR SEQ ID NO: 222:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2333-423.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 222:

GAGACGCTAT CTATGCAAGG AGG

23

(2) INFORMATION FOR SEQ ID NO: 223:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: microsequencing oligo 99-2341-485.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 223:

TTTTATCTGT CTGTTACCTA CAC

23

(2) INFORMATION FOR SEQ ID NO: 224:

B |  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2342-217.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 224:

TTTGCCTTG GACTTCATG ACA

23

(2) INFORMATION FOR SEQ ID NO: 225:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2362-270.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 225:

TCTCTCTTGG GTGGTTCCTC AAC

23

B | (2) INFORMATION FOR SEQ ID NO: 226:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 19 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: microsequencing oligo 99-2364-329.mis1
- (B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 226:

AAAATGATGA ACCATATAAC

19

(2) INFORMATION FOR SEQ ID NO: 227:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: potential microsequencing oligo 99-2367-61.mis1
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 227:

TAAACATTTC ATTATTCAG AAA

23

(2) INFORMATION FOR SEQ ID NO: 228:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2371-93.mis1  
(B) LOCATION: 1..23  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 228:

B1  
TTTTAAACTT TCCTAATACT TAC

23

(2) INFORMATION FOR SEQ ID NO: 229:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2378-200.mis1  
(B) LOCATION: 1..23  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 229:

GAGAACTTCC TGTTGAAACCT GTT

23

(2) INFORMATION FOR SEQ ID NO: 230:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2381-394.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 230:

AGTGGTCTTC AGGTTATTGG TAG

23

(2) INFORMATION FOR SEQ ID NO: 231:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2413-368.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 231:

ATTTTAAGAG GAAAACTTAA TGG

23

(2) INFORMATION FOR SEQ ID NO: 232:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2419-285.mis1  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 232:

GATCAAGCAG TGCCCCACTC

19

(2) INFORMATION FOR SEQ ID NO: 233:

B (

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2559-253.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 233:

CAGGTGTTT CATGCCCTCT TAG

23

(2) INFORMATION FOR SEQ ID NO: 234:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2566-112.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 234:

GCCTTCACAA CCGCAGAGGC AAG

23

(2) INFORMATION FOR SEQ ID NO: 235:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: potential microsequencing oligo 99-2567-329.mis1
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 235:

CACTGTCAGA TATGAAATGA TGC

23

*B1*  
(2) INFORMATION FOR SEQ ID NO: 236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 19 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: microsequencing oligo 99-2570-218.mis1
- (B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 236:

AGTTCCAAAT TATGAGAAG

19

(2) INFORMATION FOR SEQ ID NO: 237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 23 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: potential microsequencing oligo 99-2571-242.mis1
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 237:

ATAATGAATG AGTATTTGAT ATT

23

(2) INFORMATION FOR SEQ ID NO: 238:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2610-121.mis1  
(B) LOCATION: 1..23
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 238:

TTTTCCCTTC CCTAGGTATG GCT

23

(2) INFORMATION FOR SEQ ID NO: 239:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2615-83.mis1  
(B) LOCATION: 1..23
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 239:

TTTAATCAC AAGTTGGCAA AAG

23

(2) INFORMATION FOR SEQ ID NO: 240:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID

- Bl*
- (C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: DNA  
  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2620-227.mis1  
(B) LOCATION: 1..23  
  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 240:

TTGACTGGGC TCCTGATGTG TCC

23

(2) INFORMATION FOR SEQ ID NO: 241:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
  
(ii) MOLECULE TYPE: DNA  
  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2624-407.mis1  
(B) LOCATION: 1..23  
  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 241:

ATCTGGCCAT AGGCAGAACAA TTG

23

(2) INFORMATION FOR SEQ ID NO: 242:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
  
(ii) MOLECULE TYPE: DNA  
  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
  
(ix) FEATURE:

(A) NAME/KEY: potential microsequencing oligo 99-2625-70.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 242:

AGTGACTCAA CCAGAAAGAG AGC

23

(2) INFORMATION FOR SEQ ID NO: 243:

B1  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2630-67.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 243:

TAAATTCTGC CTAGAACGATT AAG

23

(2) INFORMATION FOR SEQ ID NO: 244:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2633-129.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 244:

TTTTTATTTC TTCCCTAGG CAA

23

(2) INFORMATION FOR SEQ ID NO: 245:

- B |
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 23 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: potential microsequencing oligo 99-2634-341.mis1
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 245:

GGAATCAATA TTTATTTATT ATC

23

(2) INFORMATION FOR SEQ ID NO: 246:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: potential microsequencing oligo 99-2637-28.mis1
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 246:

CCATCACTTC CTCCTAGTGA AAA

23

(2) INFORMATION FOR SEQ ID NO: 247:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2642-255.mis1  
(B) LOCATION: 1..23  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 247:

TGAGGGTGTT TCCAGAAGAG ACT

23

(2) INFORMATION FOR SEQ ID NO: 248:

- B1  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2645-118.mis1  
(B) LOCATION: 1..23  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 248:

CACAAATTAA TTGCATTGTT ATA

23

(2) INFORMATION FOR SEQ ID NO: 249:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2647-368.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 249:

TTAAGGCCTT CAACTGATTA GAC

23

(2) INFORMATION FOR SEQ ID NO: 250:

- B |
- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2649-107.mis1  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 250:

ACTCTGGAGC CTTTTATGA

19

(2) INFORMATION FOR SEQ ID NO: 251:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2103-270.mis2  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 251:

AGTGTAGAAA AATTGAAGGT CTG

23

(2) INFORMATION FOR SEQ ID NO: 252:

- B1*
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 19 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: microsequencing oligo 99-2228-301.mis2
    - (B) LOCATION: 1..19
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 252:

GGCCTTGCCC ATATGGGTC

19

(2) INFORMATION FOR SEQ ID NO: 253:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 19 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: microsequencing oligo 99-2229-240.mis2
  - (B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 253:

AAGGACTGGA ACAGGTAGT

19

(2) INFORMATION FOR SEQ ID NO: 254:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: potential microsequencing oligo 99-2240-281.mis2
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 254:

AGAAAAAA GATTCGAATT ACT

23

B | (2) INFORMATION FOR SEQ ID NO: 255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 23 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: potential microsequencing oligo 99-2242-206.mis2
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 255:

CTTAAGAAAA AAGTAAAATA TAA

23

(2) INFORMATION FOR SEQ ID NO: 256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 19 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: microsequencing oligo 99-2244-83.mis2
- (B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 256:

TACCTACATG GTTTAAGCA

19

(2) INFORMATION FOR SEQ ID NO: 257:

- B |
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 19 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: microsequencing oligo 99-2246-340.mis2
    - (B) LOCATION: 1..19
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 257:

TGCAAAACTT ATTTTCTT

19

(2) INFORMATION FOR SEQ ID NO: 258:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: potential microsequencing oligo 99-2248-76.mis2
  - (B) LOCATION: 1..23
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 258:

CCAGGGGATG GGCAGACTTC AGG

23

(2) INFORMATION FOR SEQ ID NO: 259:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2250-236.mis2  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 259:

AATAAAAATA AAAAACCCAA AGT

23

(2) INFORMATION FOR SEQ ID NO: 260:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2251-151.mis2  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 260:

TTTACAGCC AAACTAGTCT ATC

23

(2) INFORMATION FOR SEQ ID NO: 261:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: microsequencing oligo 99-2269-179.mis2  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 261:

TTGATCTTGA TAGGCTGTA

19

(2) INFORMATION FOR SEQ ID NO: 262:

B |  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2271-403.mis2  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 262:

GAAGATAAGA AAATCAAGG

19

(2) INFORMATION FOR SEQ ID NO: 263:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2272-409.mis2  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 263:

TTTACTTGC AATATTCAC AGT

23

B | (2) INFORMATION FOR SEQ ID NO: 264:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2273-528.mis2  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 264:

AGGCATTTAT TTCATATTAA TTA

23

(2) INFORMATION FOR SEQ ID NO: 265:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2275-466.mis2  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 265:

TAGTATCCCT ATTACAGTT TTT

23

(2) INFORMATION FOR SEQ ID NO: 266:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2278-276.mis2  
(B) LOCATION: 1..19  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 266:

B | TTGTTGGAGA TGCACAGGC

19

(2) INFORMATION FOR SEQ ID NO: 267:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2312-358.mis2  
(B) LOCATION: 1..23  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 267:

GGCCATTTAC CCAGAAGGCC TAC

23

(2) INFORMATION FOR SEQ ID NO: 268:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2315-213.mis2  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 268:

TTTTTTTAA AATAAGGTTT TCT

23

(2) INFORMATION FOR SEQ ID NO: 269:

- B1
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 23 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens

- (ix) FEATURE:
  - (A) NAME/KEY: potential microsequencing oligo 99-2320-292.mis2
  - (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 269:

AAATTCAATTA AATTTATAAAA AAC

23

(2) INFORMATION FOR SEQ ID NO: 270:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens

- (ix) FEATURE:
  - (A) NAME/KEY: potential microsequencing oligo 99-2321-82.mis2
  - (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 270:

AGGAAATATT TGAGTAGGTA TCC

23

(2) INFORMATION FOR SEQ ID NO: 271:

- B1*
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 23 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: potential microsequencing oligo 99-2324-338.mis2
    - (B) LOCATION: 1..23
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 271:

TTTTTACTGT TGAGGGATTT CTT

23

(2) INFORMATION FOR SEQ ID NO: 272:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: microsequencing oligo 99-2333-423.mis2
  - (B) LOCATION: 1..23
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 272:

TTTGCTGTC CAAATGTTGA ACA

23

(2) INFORMATION FOR SEQ ID NO: 273:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2341-485.mis2  
(B) LOCATION: 1..23  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 273:

AGAGCCTGTG CGATTCTTG TAA

23

B1  
(2) INFORMATION FOR SEQ ID NO: 274:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2342-217.mis2  
(B) LOCATION: 1..23  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 274:

CACAATCTGG GCTGTTCTA GAA

23

(2) INFORMATION FOR SEQ ID NO: 275:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2362-270.mis2  
(B) LOCATION: 1..23  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 275:

TTTTACTTGG TCAAGGTCAC ACA

23

(2) INFORMATION FOR SEQ ID NO: 276:

- B |
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 23 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: potential microsequencing oligo 99-2364-329.mis2
    - (B) LOCATION: 1..23
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 276:

CAATTATATG TTACCTTGCC TCA

23

(2) INFORMATION FOR SEQ ID NO: 277:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: microsequencing oligo 99-2367-61.mis2
  - (B) LOCATION: 1..23
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 277:

TTTTTGGTG AAAATGCATA TTA

23

(2) INFORMATION FOR SEQ ID NO: 278:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: potential microsequencing oligo 99-2371-93.mis2  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 278:

ATTATGTAAA AAGTAGGCAG TGA

23

(2) INFORMATION FOR SEQ ID NO: 279:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: microsequencing oligo 99-2378-200.mis2  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 279:

GGACGACAGG ACAGTTCTA

19

(2) INFORMATION FOR SEQ ID NO: 280:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: microsequencing oligo 99-2381-394.mis2  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 280:

TTTAGCTCCC CTACTTTTC

19

(2) INFORMATION FOR SEQ ID NO: 281:

B | (i) SEQUENCE CHARACTERISTICS:  
      (A) LENGTH: 19 base pairs  
      (B) TYPE: NUCLEIC ACID  
      (C) STRANDEDNESS: SINGLE  
      (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
      (A) ORGANISM: Homo sapiens

(ix) FEATURE:  
      (A) NAME/KEY: microsequencing oligo 99-2413-368.mis2  
      (B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 281:

AAATATTATG TACAATTCT

19

(2) INFORMATION FOR SEQ ID NO: 282:

(i) SEQUENCE CHARACTERISTICS:  
      (A) LENGTH: 23 base pairs  
      (B) TYPE: NUCLEIC ACID  
      (C) STRANDEDNESS: SINGLE  
      (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
      (A) ORGANISM: Homo sapiens

(ix) FEATURE:  
      (A) NAME/KEY: potential microsequencing oligo 99-2419-285.mis2  
      (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 282:

AGTCACAGCT CCCTGGAGGG TGG

23

B  
(2) INFORMATION FOR SEQ ID NO: 283:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 19 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: microsequencing oligo 99-2559-253.mis2
  - (B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 283:

GATGGATGAT GTGACACAC

19

(2) INFORMATION FOR SEQ ID NO: 284:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 19 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: microsequencing oligo 99-2566-112.mis2
  - (B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 284:

AGGGTGGCCA AGCTCCTTC

19

(2) INFORMATION FOR SEQ ID NO: 285:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 19 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2567-329.mis2  
(B) LOCATION: 1..19  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 285:

TATAGCCCAA AGAAAGCCA

19

*B1*  
(2) INFORMATION FOR SEQ ID NO: 286:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2570-218.mis2  
(B) LOCATION: 1..23  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 286:

AACTTAGCCA CTTCAGAGGC CTC

23

(2) INFORMATION FOR SEQ ID NO: 287:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2571-242.mis2  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 287:

GCTGACACAT TTAATTATA

19

(2) INFORMATION FOR SEQ ID NO: 288:

- B |
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 23 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: potential microsequencing oligo 99-2610-121.mis2
    - (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 288:

GAGAATTTC TAAGTGCAGC ATA

23

(2) INFORMATION FOR SEQ ID NO: 289:

- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 23 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: potential microsequencing oligo 99-2615-83.mis2
    - (B) LOCATION: 1..23
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 289:

TTCCCAGAAG ATGAGAATT GCT

23

(2) INFORMATION FOR SEQ ID NO: 290:

- B |
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 23 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: microsequencing oligo 99-2620-227.mis2
    - (B) LOCATION: 1..23
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 290:

TTTTAACAGC CAGCAAGATA CCC

23

(2) INFORMATION FOR SEQ ID NO: 291:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: microsequencing oligo 99-2624-407.mis2
  - (B) LOCATION: 1..23
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 291:

TTTTCTCTT CCCCATCTCT CCC

23

(2) INFORMATION FOR SEQ ID NO: 292:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: microsequencing oligo 99-2625-70.mis2
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 292:

TTTTCTCTCT TCKTCCTCTC TCC

23

(2) INFORMATION FOR SEQ ID NO: 293:

B | (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 23 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: microsequencing oligo 99-2630-67.mis2
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 293:

TTTTACTCCC TGTTCTGGAC CAA

23

(2) INFORMATION FOR SEQ ID NO: 294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 23 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: potential microsequencing oligo 99-2633-129.mis2
- (B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 294:

TCAAGGGTTC TCTCATTGTC TAC

23

(2) INFORMATION FOR SEQ ID NO: 295:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2634-341.mis2  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 295:

TTTTTAAATA ATGTCTCACC TGT

23

(2) INFORMATION FOR SEQ ID NO: 296:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2637-28.mis2  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 296:

TTTTAAAACC CACCCTCCTT TGA

23

(2) INFORMATION FOR SEQ ID NO: 297:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2642-255.mis2  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 297:

TCACATTCAGA TTCAAATGC

19

(2) INFORMATION FOR SEQ ID NO: 298:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2645-118.mis2  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 298:

TTTCAGATT CTTCATTGCT AGC

23

(2) INFORMATION FOR SEQ ID NO: 299:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:

150

(A) NAME/KEY: microsequencing oligo 99-2647-368.mis2  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 299:

AGATAATGTG AGTGGGCCT

19

(2) INFORMATION FOR SEQ ID NO: 300:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-2649-107.mis2  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 300:

AGTTTCAGTG CATTGCTGTC CTG

23

(2) INFORMATION FOR SEQ ID NO: 301:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-344  
(B) LOCATION: 1..47

(ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base a

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-344-mis1  
(B) LOCATION: 1..23

(ix) FEATURE:

(A) NAME/KEY: microsequencing oligo 99-344-mis2  
(B) LOCATION: complement 25..43

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 301:

TGCTGCCAAG GATCCATGTC AGCATGCTCC TCTCTGAGCC CTGGTCT

47

B | (2) INFORMATION FOR SEQ ID NO: 302:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: polymorphic fragment 99-366  
(B) LOCATION: 1..47

(ix) FEATURE:

(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base t

(ix) FEATURE:

(A) NAME/KEY: microsequencing oligo 99-366-mis1  
(B) LOCATION: 5..23

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-366-mis2  
(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 302:

AGGGCCTGGC TTCAGGGACA GCTTAGGAAA TGTTGTTGA GTTAGTG

47

(2) INFORMATION FOR SEQ ID NO: 303:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE

- B1*
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-359  
(B) LOCATION: 1..47
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-359-mis1  
(B) LOCATION: 1..23
- (ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-359-mis2  
(B) LOCATION: complement 25..43
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 303:

CTACAGAGTC ATCGCCTCCA TCCGGTCTCA ACAAATCCTG GCAGCTC

47

- (2) INFORMATION FOR SEQ ID NO: 304:
- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 47 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-355  
(B) LOCATION: 1..47
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base g
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-355-mis1  
(B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: microsequencing oligo 99-355-mis2
- (B) LOCATION: complement 25..43

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 304:

GGAGTTTCGG GGAGTTTCGG GAGGGTTCCT GGGAAAGAACC TCCTCCC

47

(2) INFORMATION FOR SEQ ID NO: 305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-365
- (B) LOCATION: 1..47

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base c

(ix) FEATURE:

- (A) NAME/KEY: microsequencing oligo 99-365-mis1
- (B) LOCATION: 5..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-365-mis2
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 305:

CCTACCAAGC AAGCAGCCCC AGCCTAGGGT CAGACAGGGT GAGCCTC

47

(2) INFORMATION FOR SEQ ID NO: 306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: polymorphic fragment 99-2452

(B) LOCATION: 1..47

(D) OTHER INFORMATION: Extracted from sequence gb:M10065  
(3909..3955)

(ix) FEATURE:

(A) NAME/KEY: polymorphic base

(B) LOCATION: 24

(D) OTHER INFORMATION: base c

(ix) FEATURE:

(A) NAME/KEY: microsequencing oligo 99-2452-mis1

(B) LOCATION: 5..23

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-2452-mis2

(B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 306:

TGGGCGCGGA CATGGAGGAC GTGCGCGGCC GCCTGGTGCA GTACCGC

47

(2) INFORMATION FOR SEQ ID NO: 307:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 47 base pairs

(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: SINGLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo sapiens

(ix) FEATURE:

(A) NAME/KEY: polymorphic fragment 99-344

(B) LOCATION: 1..47

(D) OTHER INFORMATION: variant version of SEQ ID301

(ix) FEATURE:

(A) NAME/KEY: polymorphic base

(B) LOCATION: 24

(D) OTHER INFORMATION: base g; a in SEQ ID301

(ix) FEATURE:

(A) NAME/KEY: Potential microsequencing oligo 99-344-mis1

(B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: microsequencing oligo 99-344-mis2
- (B) LOCATION: complement 25..43

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 307:

TGCTGCCAAG GATCCATGTC AGCGTGCTCC TCTCTGAGCC CTGGTCT

47

(2) INFORMATION FOR SEQ ID NO: 308:

*Bl*  
(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-366
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID302

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base c; t in SEQ ID302

(ix) FEATURE:

- (A) NAME/KEY: microsequencing oligo 99-366-mis1
- (B) LOCATION: 5..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-366-mis2
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 308:

AGGGCCTGGC TTCAGGGACA GCTCAGGAAA TGTTGTTGA GTTAGTG

47

(2) INFORMATION FOR SEQ ID NO: 309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

- B*
- (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic fragment 99-359
    - (B) LOCATION: 1..47
    - (D) OTHER INFORMATION: variant version of SEQ ID303
  - (ix) FEATURE:
    - (A) NAME/KEY: polymorphic base
    - (B) LOCATION: 24
    - (D) OTHER INFORMATION: base a; g in SEQ ID303
  - (ix) FEATURE:
    - (A) NAME/KEY: Potential microsequencing oligo 99-359-mis1
    - (B) LOCATION: 1..23
  - (ix) FEATURE:
    - (A) NAME/KEY: microsequencing oligo 99-359-mis2
    - (B) LOCATION: complement 25..43
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 309:

CTACAGAGTC ATCGCCTCCA TCCAGTCTCA ACAAATCCTG GCAGCTC

47

(2) INFORMATION FOR SEQ ID NO: 310:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic fragment 99-355
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: variant version of SEQ ID304
- (ix) FEATURE:
  - (A) NAME/KEY: polymorphic base
  - (B) LOCATION: 24
  - (D) OTHER INFORMATION: base a; g in SEQ ID304
- (ix) FEATURE:
  - (A) NAME/KEY: Potential microsequencing oligo 99-355-mis1
  - (B) LOCATION: 1..23

(ix) FEATURE:

- (A) NAME/KEY: microsequencing oligo 99-355-mis2
- (B) LOCATION: complement 25..43

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 310:

GGAGTTTCGG GGAGTTCCG GAGAGTCCT GGGAAAGAAC TCCTCCC

47

(2) INFORMATION FOR SEQ ID NO: 311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens

(ix) FEATURE:

- (A) NAME/KEY: polymorphic fragment 99-365
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: variant version of SEQ ID305

(ix) FEATURE:

- (A) NAME/KEY: polymorphic base
- (B) LOCATION: 24
- (D) OTHER INFORMATION: base t; c in SEQ ID305

(ix) FEATURE:

- (A) NAME/KEY: microsequencing oligo 99-365-mis1
- (B) LOCATION: 5..23

(ix) FEATURE:

- (A) NAME/KEY: Potential microsequencing oligo 99-365-mis2
- (B) LOCATION: complement 25..47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 311:

CCTACCAAGC AAGCAGCCCC AGCTTAGGGT CAGACAGGGT GAGCCTC

47

(2) INFORMATION FOR SEQ ID NO: 312:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic fragment 99-2452  
(B) LOCATION: 1..47  
(D) OTHER INFORMATION: variant version of SEQ ID306
- (ix) FEATURE:  
(A) NAME/KEY: polymorphic base  
(B) LOCATION: 24  
(D) OTHER INFORMATION: base t; c in SEQ ID306
- (ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-2452-mis1  
(B) LOCATION: 5..23
- (ix) FEATURE:  
(A) NAME/KEY: Potential microsequencing oligo 99-2452-mis2  
(B) LOCATION: complement 25..47
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 312:

TGGGCAGCGGA CATGGAGGAC GTGTGCGGCC GCCTGGTGCA GTACCGC

47

(2) INFORMATION FOR SEQ ID NO: 313:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 20 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
ID307 (A) NAME/KEY: upstream amplification primer for SEQ ID301 and SEQ  
(B) LOCATION: 1..20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 313:

GCTCTCATAT TCATTGGGTG

20

(2) INFORMATION FOR SEQ ID NO: 314:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
ID308 (A) NAME/KEY: upstream amplification primer for SEQ ID302 and SEQ  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 314:

B1 TCTCTCCCGT GTTAAATG

18

(2) INFORMATION FOR SEQ ID NO: 315:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
ID309 (A) NAME/KEY: upstream amplification primer for SEQ ID303 and SEQ  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 315:

AATCTTCTTG CTCCTGTC

18

(2) INFORMATION FOR SEQ ID NO: 316:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID304 and SEQ  
ID310  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 316:

AGGTTAGGGG TGTATTTC

18

(2) INFORMATION FOR SEQ ID NO: 317:

B)  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID305 and SEQ  
ID311  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 317:

AGACTGTGAC CTTAGACC

18

(2) INFORMATION FOR SEQ ID NO: 318:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: upstream amplification primer for SEQ ID306 and SEQ  
ID312

(B) LOCATION: 1..18  
(D) OTHER INFORMATION: Extracted from sequence gb:M10065  
(3791..3808)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 318:

GACGAGACCA TGAAGGAG

18

(2) INFORMATION FOR SEQ ID NO: 319:

B1  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
ID307 (A) NAME/KEY: downstream amplification primer for SEQ ID301 and SEQ  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 319:

TGGCTGCGGT TAGATGCTC

19

(2) INFORMATION FOR SEQ ID NO: 320:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

ID308 (ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID302 and SEQ  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 320:

AGGGGTAACT CTTGATTG

18

(2) INFORMATION FOR SEQ ID NO: 321:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID303 and SEQ

ID309  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 321:

ACCAAGGCAT AGCTTCTC

18

(2) INFORMATION FOR SEQ ID NO: 322:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID304 and SEQ

ID310  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 322:

ATACAGCCAG GGAGATAG

18

(2) INFORMATION FOR SEQ ID NO: 323:

- (i) SEQUENCE CHARACTERISTICS:

- B |
- ID311
- (A) LENGTH: 18 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID305 and SEQ  
ID311  
(B) LOCATION: 1..18

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 323:

AATTGCTACC CCCAATTC

18

(2) INFORMATION FOR SEQ ID NO: 324:

- ID312
- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 18 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: downstream amplification primer for SEQ ID306 and SEQ  
ID312  
(B) LOCATION: 1..18  
(D) OTHER INFORMATION: Extracted from sequence gb:M10065 (complement  
4378..4395)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 324:

TCGAACCAGC TCTTGAGG

18

(2) INFORMATION FOR SEQ ID NO: 325:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: SINGLE
- (D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-344.mis1  
(B) LOCATION: 1..23  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 325:

TGCTGCCAAG GATCCATGTC AGC

23

(2) INFORMATION FOR SEQ ID NO: 326:

- Bl*  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-366.mis1  
(B) LOCATION: 1..19  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 326:

CCTGGCTTCA GGGACAGCT

19

(2) INFORMATION FOR SEQ ID NO: 327:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR  
(ii) MOLECULE TYPE: DNA  
(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens  
(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-359.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 327:

CTACAGAGTC ATCGCCTCCA TCC

23

(2) INFORMATION FOR SEQ ID NO: 328:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 23 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-355.mis1  
(B) LOCATION: 1..23

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 328:

GGAGTTTCGG GGAGTTTCGG GAG

23

(2) INFORMATION FOR SEQ ID NO: 329:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: DNA

(vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens

(ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-365.mis1  
(B) LOCATION: 1..19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 329:

CCAAGCAAGC AGCCCCAGC

19

(2) INFORMATION FOR SEQ ID NO: 330:

- B*
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 19 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR
  - (ii) MOLECULE TYPE: DNA
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (ix) FEATURE:
    - (A) NAME/KEY: microsequencing oligo 99-2452.mis1
    - (B) LOCATION: 1..19
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 330:

CGCGGACATG GAGGACGTG

19

(2) INFORMATION FOR SEQ ID NO: 331:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 19 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens
- (ix) FEATURE:
  - (A) NAME/KEY: microsequencing oligo 99-344.mis2
  - (B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 331:

CAGGGCTCAG AGAGGAGCA

19

(2) INFORMATION FOR SEQ ID NO: 332:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: potential microsequencing oligo 99-366.mis2  
(B) LOCATION: 1..23
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 332:

CACTAACTCA ACAAACATTT CCT

23

(2) INFORMATION FOR SEQ ID NO: 333:

- B1
- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-359.mis2  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 333:

TGCCAGGATT TGTTGAGAC

19

(2) INFORMATION FOR SEQ ID NO: 334:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: NUCLEIC ACID  
(C) STRANDEDNESS: SINGLE  
(D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: DNA
- (vi) ORIGINAL SOURCE:  
(A) ORGANISM: Homo sapiens
- (ix) FEATURE:  
(A) NAME/KEY: microsequencing oligo 99-355.mis2  
(B) LOCATION: 1..19
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 334:

GGAGCTTCTT CCCAGGAAC

19

(2) INFORMATION FOR SEQ ID NO: 335:

- B1
- (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 23 base pairs
    - (B) TYPE: NUCLEIC ACID
    - (C) STRANDEDNESS: SINGLE
    - (D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens

- (ix) FEATURE:
  - (A) NAME/KEY: potential microsequencing oligo 99-365.mis2
  - (B) LOCATION: 1..23

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 335:

GAGGCTCACC CTGTCTGACC CTA

23

(2) INFORMATION FOR SEQ ID NO: 336:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23 base pairs
  - (B) TYPE: NUCLEIC ACID
  - (C) STRANDEDNESS: SINGLE
  - (D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: DNA

- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM: Homo sapiens

- (ix) FEATURE:
  - (A) NAME/KEY: potential microsequencing oligo 99-2452.mis2
  - (B) LOCATION: 1..23

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 336:

GCGGTACTGC ACCAGGCGGC CGC

23

89

104

169